

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): A method for processing a urethane resin, comprising:

~~the step of~~ adding to a urethane resin a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (COOH), ~~and~~ a salt of the carboxyl group, an ester of the carboxyl group and an acid anhydride of the carboxyl group (-CO-O-CO-).

Claim 2 (Currently Amended): The method according to claim 1, wherein the decomposing agent is added in an amount that provides 0.1 to 3 equivalents of the functional group for each equivalent of ~~isocyanate group~~ urethane bond present in the urethane resin.

Claim 3 (Original): The method according to claim 1, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 4 (Currently Amended): The method according to claim 3, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Claim 5 (Currently Amended): A method for processing a urethane resin, comprising:

~~the step of adding to a urethane resin a decomposing agent containing at least one functional group selected from the group consisting of an isocyanate group (NCO) and an epoxy group,~~

the decomposing agent being added in an amount that provides 0.1 to 2 equivalents of the ~~functional~~ epoxy group for each equivalent of urethane bond ~~isocyanate group~~ present in the urethane resin.

Claim 6 (Original): The method according to claim 1, wherein the decomposing agent further contains at least one hydroxyl group.

Claim 7 (Original): The method according to claim 2, wherein the decomposing agent further contains at least one hydroxyl group.

Claim 8 (Original): The method according to claim 5, wherein the decomposing agent further contains at least one hydroxyl group.

Claim 9 (Currently Amended): The method according to ~~claims~~ claim 1, wherein the urethane resin and the decomposing agent are mixed under pressurized and heated condition.

Claim 10 (Currently Amended): The method according to ~~claims~~ claim 2, wherein the urethane resin and the decomposing agent are mixed under pressurized and heated condition.

Claim 11 (Currently Amended): The method according to ~~claims~~ claim 5, wherein the urethane resin and the decomposing agent are mixed under pressurized and heated condition.

Claim 12 (Currently Amended): A decomposed substance of a urethane resin ~~characterized in that it~~ which is produced by
decomposing a urethane resin by
adding to the urethane resin ~~any one of~~ a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (-COOH), ~~a salt of the carboxyl group, an ester of the carboxyl group~~ and an acid anhydride group of the carboxyl group (-CO-O-CO-), ~~and a decomposing agent that contains at least one functional group selected from the group consisting of an isocyanate group (-NCO) and an epoxy group.~~

Claim 13 (Original): The urethane decomposed substance according to claim 12, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 14 (Currently Amended): The urethane decomposed substance according to claim 13, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Claim 15 (Currently Amended): A method for producing a recycled resin, comprising:

~~the steps of~~ adding to a urethane resin ~~any one of~~ a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (-COOH);

Application No.: 10/718,527

Reply to the Office Action dated: June 30, 2005

~~and a salt of the carboxyl group), an ester of the carboxyl group and an acid anhydride of the carboxyl group (-CO-O-CO-), and a decomposing agent that contains at least one functional group selected from the group consisting of an isocyanate group (-NCO) and an epoxy group~~
to thereby decompose the urethane resin and obtain a decomposed substance, and

reacting the ~~resultant~~ decomposed substance of the urethane resin with a compound that contains at least one functional group selected from the group consisting of an epoxy group and an isocyanate group.

Claim 16 (Original): The method according to claim 15, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 17 (Currently Amended): The method according to claim 16, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Claim 18 (Currently Amended): A recycled resin, ~~characterized in that it~~ which is produced by

adding to a urethane resin ~~any one of~~ either a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (COOH) and a salt of the carboxyl group, an ester of the carboxyl group and an acid anhydride (-CO-O-CO-) of the carboxyl group, ~~and~~ or a decomposing agent that contains at least one functional group selected from the group consisting of an isocyanate group (-NCO) and an epoxy group, thereby obtaining a decomposed substance, and

then reacting the ~~resultant~~ decomposed substance of the urethane resin with a compound that contains at least one functional group selected from the group consisting of an epoxy group and an isocyanate group.

Claim 19 (Original): The recycled resin according to claim 18, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 20 (Currently Amended): The recycled resin according to claim 19, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Application No.: 10/718,527

Reply to the Office Action dated: June 30, 2005

BASIS FOR THE AMENDMENT

The claims have been amended to better conform to accepted US claim format. The amendments of Claims 2 and 5 are supported at page 5, lines 21-25 of the specification. The amendment of Claim 18 is supported at page 7, 1st paragraph.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-20 will now be active in this application.